

Application No.: 10/677,075

Docket No.: TOW-045RCE

REMARKS

Applicant amends claims 1-6 to clarify the invention. Support for the claim amendment can be found throughout the specification and at least at Figs. 5-7 and related text. No new matter is added. Upon entry of this amendment, claims 1-6 are pending, of which claim 1 is independent. Applicant respectfully submits that the pending claims define over the art of record.

The Claimed Invention

The claimed invention provides an electronic key system where the transmitting antenna is installed on an instrument panel of a motorcycle or a framework surrounding the instrument panel. The antenna is installed near the center of rotation of the handle bar and the instrument panel turns as the handle bar turns. With this structure, the antenna turns as the handle bar turns, and the instrument panel necessary for driving is effectively utilized and the installation area of the antenna is made small. Therefore, the transmitting range can cover the region that the user needs when operating the motorcycle. As a result, as least when the user gets on and operates the actual motorcycle and when the user is running with the actual motorcycle, communication of the control apparatus with the electronic key carried by the user can be performed with certainty.

Claim Rejection Under 35 U.S.C. §103

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,124,565 to Yoshida et al. (hereafter "Yoshida") in view of United States Patent No. 6,208,305 to King (hereafter "King"). Claims 2-3 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Yoshida reference in view of the King reference and further in view of United States Patent No. 6,078,293 to Yamamoto (hereafter "Yamamoto"). Claims 4-6 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Yoshida reference in view of the King reference further in view of United States Patent No. 4,132,994 to Caldwell (hereafter "Caldwell"). Applicant respectfully submits that the combination of the Yoshida reference, the King reference, the Yamamoto reference, and the Caldwell reference fails to teach or suggest that in a motorcycle, the transmitting antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns, as recited in amended claim 1.

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The Yoshida Reference

The Yoshida reference teaches an electric power supply control device for a motorcycle. The Yoshida reference teaches an antenna that is fixedly installed to a cowl of a motorcycle. The Yoshida reference does not teach or suggest the limitation that in a motorcycle, the transmitting antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns, as recited in amended claim 1.

The King Reference

The King reference teaches a loop antenna 40 that is installed in the rim 39 of a steering wheel 26 of a four wheel vehicle. In contrast, the claim invention is directed to a motorcycle. In addition, because the antenna 40 of the King reference is in the shape of a loop, the antenna 40 needs to be installed all along the rim 39 of the steering wheel 26, resulting in a disadvantageously large installation area. Furthermore, claim 1 requires that the transmitting antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns. Since the King reference is directed to a four wheel vehicle, it does not teach or suggest a handle bar as a driving instrument. Hence, the King reference cannot teach or suggest that the transmitting antenna is installed near the center of rotation of the handle bar. The King reference further teaches an instrument panel 28 that is fixedly positioned separately from the steering wheel 26 and hence, regardless of rotation of the steering wheel 26, the instrument panel 28 does not turn with the steering wheel 26. Hence, the King reference cannot teach or suggest that the instrument panel turns as the handle bar turns. Applicant respectfully submits that the King reference fails to cure the deficiency of the Yoshida reference.

The Yamamoto Reference

The Yamamoto reference teaches an antenna 1A mounted inside of a switch main body 1C of a column switch 1 supporting a steering wheel 2 of a four wheel vehicle. In contrast, the claimed invention is directed to a motorcycle. The Yamamoto reference teaches a transceiver circuit 2E, a remote control switch 2D, a common ground pattern 2B, but not an instrument panel, mounted substantially at the center of the steering wheel 2. Hence, Applicant respectfully submits that the Yamamoto reference does not teach or suggest the limitation that the

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transmitting antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns, as recited in amended claim 1. Applicant respectfully submits that the Yamamoto reference fails to cure the deficiencies of the Yoshida reference and the King reference.

The Caldwell Reference

The Caldwell reference teaches an antenna 22 mounted along the edge of a windshield 18. However, the Caldwell reference does not teach or suggest the limitation that the antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns, as recited in amended claim 1. Applicant respectfully submits that the Caldwell reference fails to cure the deficiencies of the Yoshida reference, the King reference, and the Yamamoto reference.

Accordingly, Applicant respectfully submits that the combination of the Yoshida reference, the King reference, the Yamamoto reference, and the Caldwell reference fails to teach or suggest that in a motorcycle, the transmitting antenna is installed near the center of rotation of the handle bar and that the instrument panel turns as the handle bar turns, as recited in amended claim 1. Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 1.

Applicant notes that the dependent claims also recite patentable subject matter. As such, for this and the reasons set forth above, Applicant respectfully submits that the dependent claims also define over the art of record.

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CONCLUSION

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. TOW-045RCE from which the undersigned is authorized to draw.

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Respectfully submitted,

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